Final Report for The Monkfish RSA project:

An Evaluation of the Effects of Gill net Alterations on Selectivity and Relative Efficiency in the Monkfish Fishery

Submitted to:

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This research project was plagued by difficulties; some due to temporal restrictions integral to the RFP itself and the defined fishing year and others due to design flaws in the proposal's funding mechanisms that did not allow for adequate elasticity given rapid fluctuations in fuel prices that occurred during the crucial first few months of the project.

The 2008 Monkfish RSA allowed one year from May 1, 2008 to April 30^{th,} 2009 for funds to be acquired and research conducted, assuming research was to occur in conjunction with allotted DASs. A one year period between this start and stop date is simply not enough time given the temporal and spatial availability of the species in the Mid-Atlantic and gear supply restrictions to acquire the funds, purchase, hang and then conduct research.

The May 1 to April 30 fishing year does not fit the temporal or spatial distribution of monkfish with respect to the Mid-Atlantic, in fact it cuts the season in half. May is the best month for monk fishing in the northern mid-Atlantic followed by March and April. Peak availability occurs as much as a month earlier in the southern portions of the fishery. This biological distribution implies that the best month for acquiring research money through the RSA occurs in the last or first month of the fishing year. Word of this grant's acceptance was not received until the last days of April 2008 in the middle of the peak monkfish run. In theory, this was acceptable because I could legally use the allotted DAS immediately. In practice, this does not allow enough time for contacting fishermen during their busiest month. In addition, fishermen do not need nor desire any DAS at this time because their official fishing season just began and they all have fresh allotments of their own DAS to use.

To further understand how this temporal restriction does not encourage completion of Monkfish RSA gillnet engineering projects in the Mid-Atlantic one must better understand the numerous factors that influence gillnet webbing availability.

Federal restrictions limit the amount of webbing that can be imported from foreign venders, once the yearly quota is reached, no more webbing can be imported until a sufficient period of time passes. If the import quota has not been filled American vendors do not place orders until a minimal order size of a container volume is attained. These factors result in an average waiting period of about six months to delivery after ordering. Most orders are placed once a year in late August for a March delivery so that gear can be ready for spring fishing. This is the month before you receive notification of grant acceptance. If the webbing is unique, which is often the case in gear alteration experiments, this delivery time is often extended and minimum lot orders required.

My experiences illustrates how the date of grant notification, the defined fishing year, the biological availability of the species and the extended waiting period for gear make it near impossible to complete a gillnet alteration experiment through the current Monkfish RSA in the Mid–Atlantic.

In order to attain required funds to pay for gear alone 29 DAS needed to be conducted and money collected (for financial explanation see attachment 1) by the end of July 2008. This July cut off date would allow for the six month webbing supply limitation, a month for gear construction and March and April of 2009 for the 15 research days. Since fishermen generally take a month to get the check to you this implies the end of June, giving you only May and June to fish and since there are not enough monkfish off of the Mid-Atlantic after the end of May to warrant targeting and they do not really return in sufficient numbers until approximately late Oct.; this really gives the Mid-Atlantic researcher the month of May to attain the funds. The notification of RSA that cuts the best months of the southern monkfish fishing year in half and the fact that you cannot get a hold of the fishermen when they are all at sea made May completion nearly impossible.

It was also my luck that during May of 2008 fluctuations in the market price of oil severely limited spring fishing efforts and the risk fishers were willing to take on any profit loss associated with an RSA program. The only alternatives I had were to pay for the gear myself and gamble on getting enough trips completed the following spring to pay myself back or follow the fish North as they migrated and enlist Northern fishers. Inflated fuel prices made the mandated percentage of profit and my budgeted return on each 24 hour period too high to be attractive to smaller inshore fishers, who only land one daily limit in ~15 hours. When I attempted to get larger vessel interested I discovered that many owners of the larger over night boats were also being negatively impacted by the inflated gas prices. Larger operations that were previously running two vessels had switched to running only one at a time thus eliminating one crew. This theoretically doubled their number of days at sea and thus further decreased their desire for my DAS. As I contacted fishers further and further North, I increasingly spoke with captains who had more than enough DAS having already been contacted by the Gulf of Maine Research Institute who was also doing an RSA project.

With market fluctuations and uncertainty in the fishing industry, I was unable to get any fishermen to cooperate until Dec. 2008, far too late to bother ordering gear. In fact, I was in the process of writing my project cancelation request when the first day was used. At that point, fishermen where depending on my RSA DAS to pay for engines etc. and I did not feel it was fair for me to pull the rug out. I held out hope that enough funds would be collected at the end of the NMFS fishing year/beginning of Southern monkfish season but this was not the case. The final coup d'état was the fact that a fisherman never paid for the DAS he used (~ $7500).

In conclusion, the timing of the fishing year and grant notification does not suit the specie's temporal or spatial distributions with regard to the Mid-Atlantic monkfish gillnet fishery. In fact, the definition of the fishing year and temporal attributes of the current Monkfish RSA system severely biases this RFP in favor of New England researchers and fishers because it cuts the best fishing period of the year for monkfish in the Mid-Atlantic in half. This unintended temporal bias combined with webbing availability restrictions and unforeseeable weaknesses in my project's funding design due to unpredictable fluctuations in the free market to cripple the proposed methodology and funding mechanism of this project. An extension would have done nothing but lose money for the

investigator and the research institute under the proposed budget because proposed research was to be conducted on RSA DAS and that were tied to the one year restrictions.

Attachment 1.

One and a half daily limits were to be landed in each 24 hour one minute period so that a profit of $670 a trip was attained. Calculated daily income was based on the mandated ~30% of landings, an assumed value of a dollar a pound and 2235 pounds per trip (1.5 daily limits). Twenty –nine days or $15890 (without overhead) were required to purchase and hang the gear experimental gear. The conservative daily limit and price per pound inputs were selected to build in a financial buffer so that hard ship on the fishers per trip would be reduced and financial incentives increased. On the fifteen research days, to be conducted on board commercial vessels on allotted DAS days, the fisher was to receive a larger portion of the two daily landings as payment for their assistance. On these trips the project was to be paid $447 or 30% of one daily limit at a dollar a pound.